

Maclean's

Canada's National Magazine

5¢
a copy

TORONTO
MAY 15
1942

Featuring

CANADA'S INDUSTRIAL FRONT

A Story of Men,
Machines and
Weapons in the
Making



Cover: Hon. C. D. Howe, Minister of Munitions and Supply. Photo by Karsh.

"Don't look now boys, but..."



THIS impression by Leslie Kierke in the line of a series that is being passed around the war-time press in Philco factories who are helping to reduce the expense of war... an impression of the gleaming profits of their efforts... an impression of the open eyes shown on "More... Better... Stronger" in their goal!

Through its Research department and design service organizations, Philco efforts to its owners strengthen Canada's war effort and ensure a longer life, a means of conserving and prolonging the use and expense of Philco products.

PHILCO
CORPORATION OF CANADA, LIMITED
Toronto
Philco • Bell & Howell • Radio-Photographs • Radio Pictures and Prints



NAVAL GUN MOUNT
Made by
Bata
SHOE COMPANY OF
CANADA LIMITED
Montreal, Que.

In the *Editor's* Confidence

THAT ISSUE record you have learned. On and off April—across the Great Lakes region comes the land, water and the airways and the news of the war. And, not infrequently, but a remembrance of us, half a dozen small workers, the Press Correspondents Department and the public relations office of the Government of Manitoba and the Province, quickly learning a song over the completion of the Mutual West Number of *McCall's*.

It won't be our attempt to undermine a survey of Canada's war production into too few get us numbered. We have taken the time that we were given to make our survey complete. What happened was that after our system had reflected from their learning, new and more rigid censorship regulations were suddenly imposed, and the government's position concerning censorship was put into practice.

Our own Ottawa correspondent,

Kenneth H. Wilson, on page nine

skillfully summarizes the witnessed extension of Canadian censorship by the Government of Manitoba. In the same issue, Ottawa twelve Leslie Roberts and R. A. Davies continue to tell the story of *Guys and Dolls*, and in the present issue of the *McCall's* magazine or magazine on page eight, Lawrence Craig, Ottawa L. Shaw and Adna C. MacIntosh, editor of *Canadian Shipping and Transportation*, discuss the war at a hand. On page twenty-one, Ronald Keith, editor of *Canadian Aviation*, tells the story of our aircraft production, and on page twenty-four, Leslie Roberts, *Editor*, re-creates the image of chemistry as applied to war effort. Trade and motor vehicles are dealt with by Frederick Edwards on page twenty-six.

From edition to edition we devoted to our regular features, Leslie Lathey, *Production at Ottawa and Galt*, George L. Fenton, *On the Move*, and Fenton in his movement of raw materials and war supplies—will be featured in our next issue.

Now, in June 7, another will be the opening installment of a new serial—“Dives Down” by Jack Petersen. Against a North Country background, it's a story of the war, of the war, of the war, of the war, and the war. There's a unique angle, too, in the shape of a sea-creature. And a girl, quite a bit different from the usual.

Leslie Lathey, *Engineering at Ottawa*, and a good variety of other fact and fictional features will keep you posted on what's what.

Leslie Roberts



USE "STATION-TO-STATION"
LONG DISTANCE TELEPHONE SERVICE



As quick as you can say
"Jack Robinson"
- isn't very quick!

NOT as telephone engineers reckon quickly need *True*, the long distance telephone will carry your words almost with the speed of light clear across the continent... but it takes half a second to say "Jack Robinson"..., and, if a million telephone subscribers were to say it over one long distance line, it would be that has up for six days and six nights! During the present emergency, you can help us to maintain long distance telephone service at its normal peak of efficiency by not saying "Jack Robinson" unless you really have to. Whenever possible, place your long distance calls "Station-to-Station" rather than "Person-to-Person". You'll save money, too, because "Station-to-Station" costs less.



The Trans-Canada Telephone System and its member companies are doing their best to meet urgent war needs and at the same time satisfy growing civilian demands for day-in-day-out long distance telephone service.

**TRANS-CANADA
TELEPHONE SYSTEM**

• OWNED AND OPERATED BY THE NINETEEN MAJOR TELEPHONE SYSTEMS SERVING THE DOMINION OF CANADA

THIS IS WHAT WE THINK



The Nation's Forge

AS ONE of a series of numbers devoted to the various branches of Canada's War Effort (previous numbers have discussed the Air Force, the Army and the Navy) this one of Maclean's presents in compact form the story of our Industrial Front.

It is a story of considerable achievement. Construction of immense factories and shipyards into the pattern of a wartime forge has been accomplished with skill, cooperation and great speed and efficiency. Characters little understood by the public have been, and are being, revealed. The adaptability of Canadian workers, men and women, has been demonstrated. Production in a number of fields is better than was expected, and even beyond.

Considering the picture as a whole, a task of finance proportionate for a nation that size has been well performed. The object behind the page which follows is to give the reader a bird's-eye view and to consider where certain areas stand. It is not by any means to suggest that we are doing all we can do. That there is room for improvement, and even for future, is an unshakable truth.

There still are areas of improvement in the few of material areas of equipment, accompanying skill, cost of time and money.

An appeal for a speeding up of production, Hon. G. D. Howes stated recently.

"We must rapidly meet all of our calculations. Yet an alarmingly large pro-

portion of our wartime output, even yet, makes that we firm now, realize, at the very least, the awful crisis in our history.

"It is not a question for us to answer or nimrods to decide. It is not within their sole power to turn the tide of battle. The main responsibility rests on the shoulders of the average citizen—the workers in the plants, the women in the houses—the executives who control the productive capacity of our enormous big and little

"Businessmen may be too much to discover the ways and means of speeding up production, and then the future is an unshakable truth.

"Let them too much to expect that every man in Canada who has productive capacity at his command will forget all profit and profit, will overlook rights and privileges not even well thought to the production of the war materials as surely used by those who less the money on war than others have. Satisfaction on occasion shockingly rare can even occur.

The Page of Victory requires white heat, a palpitating and physical fever that blazes

"We hope that the results of what has been started—and of what has to be put achieved—will serve to stimulate that fever.

Prevent Sickness

IN CANADA every year, sickness causes a loss of time of approximately \$10,000,000.

The average wage earner loses one and a half days' work and wages per year—over 100 days through accidents and non-industrial accidents, half a day through occupational accidents.

In terms of production the employer's loss is one and a half hours or high—\$75,000,000. That is the value of lost work.

These figures issued by the Industrial Division of the Health League of Canada, are based on many years' survey of some 3,000 industrial plants.

The loss can be and is being reduced. Fully 90 per cent of all sickness is preventable. Through adequate disease prevention programs using factors like reducing by half the average yearly loss of work and wages per worker.

Workers' prevention programs PAY—BOTH WORKER AND EMPLOYER. They reduce accidents and occupational diseases, absenteeism, labor turnover, compensation in sickness payments. They improve efficiency and industrial labor relations.

Briefly

WE HAVE a Transit Commission, an administrator of Services, to control transportation of goods, a Transport Controller, to evaluate requirements for materials and supplies a Board of Transport Commissioners, to "coordinate and harmonize the operations of all carriers engaged in transport by railway, ship and aircraft"; a Canadian Shipping Board, a Shipping Finance Commission, an advisory body concerned with requirements of ships, and several other authorities. There are reports of over-loading, and, in some cases, confusion. Look at us if we need a Go-ordinator of Transport.

Board漫游者 too many bugs. Speedy classification of a patient's blood is necessary, particularly to combat typhoid. It is suggested to us that it might be a good idea to have a person's blood type put on the National Registration Card.

Our Savings Stamps are an important phase of Canada's war financing. School children, for instance, have done a particularly outstanding job in purchasing them. There are still many potential buyers in other classes however who haven't yet got the savings stamp habit. Now that the country's resources are to be used more widely as war, sales should be greatly increased.

THE Craftsman goes to War!

While bombs burst, shells crash, engines roar and whine, tanks—battle-tested veterans observe the performance of Empire battle equipment. The tank is the backbone of a world-wide Commonwealth force which uses new methods of warfare, new ideas for victory vehicles.

An idea is flowing back to Ford of Canada, taken from the engineers department. There the Canadian tankers gain war tactics—learning blueprint battle body with accuracy, exactness and speed. Knowing that the lives of brave men depend on his knowledge, the soldier looks to Ford of Canada.

For every one a battlefield, an Empire soldier works at the "front," emerged tankless—"flying traps" of the motor and tanking front—about in, around and among tanks—aircraft, armored vehicles, armored tanks, armored cars, armored wireless equipment. These speedy fighting machines "made-to-order" for modern warfare on Ford of Canada's Warfront plant.

The quiet barrel ambulances in Warfront and the square-headed men on the battlefield fight side by side. The ambulance is part of "the Test Army" of mobile units that Canada's fighting machine has some mobility, better, faster, stronger. The Empire sector is using these modern "tools of war" to "show the world" a less arm, one always looks to them.

W. G. Grayson

A statement by W. G. Grayson, President, Ford of Canada.

FORD MOTOR COMPANY OF CANADA, LIMITED

*No matter where
they are serving..*
**THEY ALL LIKE TO
WRITE HOME ...often.**

If you have a boy or a girl who is away from home playing a part in the great work of delivering humanity, remember that you are just as close in their strength as they are in power.

Make it easy for them to express themselves to you and want to share often to give them the "hotkey" chat-chat, the family news, the neighborhood story, and the team-winning message of love and affection that they are doing. Encourage them to write...at almost as much as there is to share as you.



THIS will write over paper with a Fader Pen. This beautiful pen, which needs refilling less often than any other pen, has a 14K Gold Nib that glides over the paper so smoothly that writing is efficient and pleasant.

If your lined one hasn't a Parker Pen, by all means send a Parker Aeron writing set, in the same leather case which day so elegantly in the uniform pocket. One other writing set for so steadily the needs of those who are away from home . . . or makes it so easy for them to write to you.

See them now at any good gas outlet, and remember...
possession of the Feltex Blue Diamond is guaranteed for 100%

Parker
VACUMATIC

RAF 1000 ACTIVE SERVICE
80 Years Bomber, Recce
and Peace to match in
Service case 817300
Aviation Service Books, £10
and £1.99

Quink
the better ink at your
Pharmacy. Great price
per oz. it writes.



She works in a shirt-making plant. In the "change board" she has described her street clothes, now she dons her work uniform and turban.

We Are the Workers

SOMEWHERE in Ontario there is a thriving new town just a pace off, with white sidewalks and houses and lawns.

A tall white flagpole stands in a long square and the British flag waves gaily in the clear Canadian sky—gaily, despite the fact it is dirty and ragged. You see, it was bitten by a dragon in England and grey water morning, but they cleaned it. It has the white and red and blue of silk. Now it looks transparently like a old dress after a hard wash, and knowing this, we miss our hands to wash it again.

We are a mountain people, a large spreading village of low white buildings, mostly as the *Shan's* Palace, where Liang Mano Pali - it was Mano you remember, who brought gunpowder to China and brought it back to the world - to the severe and decoration of the human forms ever since.

If you work late, you run up "what it is still night?" See the steady woman on the Park, and gaze along the dark streets to the car line. You think it peaceful, "I am the only one moving in the world, of the rest are silent, the only feature, the database, the shattered scene." But there the dark way 200 see another figure moving in the shadows, watching him yourself, with his hands in a green jacket, looking but way among the passing

going to work. Another and another leaves us and the time goes on they are like us going on many different directions, old and young, gay and silly, the grooms and the brides, the mothers and the fathers, the wives, some of the grandpas, grandmothers and grandpas, the husbands and spouses, all leaving us. In this manner talking, talking, talking while we had our breakfast, have been us day.

"To Each One Their"

I ALL began many ages ago when I had left it, running on for a long time, a racing little mouse of a spirit that seemed to desire again and again to burst from the cage of my body. I had been a man, I had been a woman, I had been a child for 20 million years.

"In our ears the din . . .
in our eyes the glare . . .
we are the munitions workers . . . carrying the torch
behind the battle line."

By EDNA JAQUES

Breakfast, talking, telling what we had for breakfast, how busy we are.

...and quickly realized to have a part in the agonistic struggle that entombed all mankind in the deadly grip.

"To Kill a Mockingbird"

IT ALL began months ago for me. I had felt it coming on for a long time, a rising tide made of anguish that seemed to grow stronger every day. I lived and would not be denied. I must do more than this was. I must work for it with my

Women can only write when you are away from your brains and heart and teeth. I wanted to stand and tell all and tell all and help was n't, so when I am very sick I like feel satisfied in my own heart that I helped a little bit to earn our peace.

services, the *disadvantages* and *benefits*, the *measuring* and *evaluating* of the *work*.²



She used to be a high-speed typist, but now she's a 100-tonne anti-aircraft gun mount. She helps to work in a war plant when the guns in gun barrel lathe



Bullets by the millions. Feeding millions of them into the machine that can turn out 300 bullets per second



Shells by the millions come from this building plant. These are 3.7 anti-aircraft shells in the finishing stage

FIRE POWER

By LESLIE ROBERTS

EARLY from Montreal, Leslie, helping steadily with the work of many men, has come the following message: "Down the railroad which, before March, was just a couple of yards of rail connecting across French Canada, Englishmen, French, Indians, Americans, Greeks, Yugoslavs, Latvians, Norwegians, Spaniards, French, English, Americans, and others, have joined together to help build a mighty armament. During a long, long, great struggle the staff built the docks of Laramie and the docks of Colton, Arkansas as well."

There is a kind of great tide that is sweeping across the continent, a tide of which the war is the great cause. It is sweeping men out of the assembly line and into battle, flushed and driven by the urge to win.

The great stamp press is the only one left on the line, however, which is to do with the war. The stamp press, which is the chief cause of all the trouble and problems, was the first mass production of Canada to get into war production, all in assembly progress. The stamp press is therefore to 1941 the first to be converted to war work, the first to be converted and emerge to new task, ready for casting new bands and other various parts of Bofors guns and naval guns.

These enormous changes in themselves are not the only changes, however, for the changes they would create from antecedent to antecedent of the average day商店。This is the beginning, that lacking shank of roughly shaped metal, the barrel of a weapon which will pour destruction from the gun barrel, in tracer or incendiary

shells and missiles, won't go wrong as long as he gets the gun and the gun gets the shank. This is the secret of the whole war program, this fact. Still had to be created overnight. This huge gun plant is one of the places where this secret developed, steadily because it was one of the first to convert to war work.

By Clark in Glass

IT CAME to production as always a series of catastrophes as a long struggle over unanswered. Late in 1937 a newspaperman had from Bofors armed with a license to build the heavy machine tools and a working 10-ton gun, Maxine, in the Pionier Works. The gun, which shortly after being, he received an "indefinite order" from Britain to make 30 pounds of a fire-resistant plant with the co-operation of France's Schneider-Cannone people, who were as private as the sun in their secretiveness, was to be built for the state. By midsummer 1938 the construction job was in hand.

When France fell, came disaster; the Schneider men packed up and went to the leisure of another country. The company, which had been operating, was forced to undertake the production job and did. On December 15, 1941, the first 30-pounds rolled off the assembly line.

While the problem of mass production of the 30-pounds was being sorted out and assembly

work was still with guns, shells, bullets. Canada now makes guns by the thousand, shells by the million, bullets by the hundred million.



Large-scale gas wells in Canada in the 2.7 well-density scenario. Results from another plant are presented with respect to the Peabody

Expert de mesure les faire



hadn't presented another paper. An older plane, the Douglas, put it up as the sole survivor. They grouped them so that because literally anyone could get around them, there was a 100% survival rate. They had to be very careful with explosives, but not propane. Those were the mechanics. In all, over 2,000 men and girls were at work in two production units and 100 planes were rolled out the door. The buildings were just the heating stage. All this from the general and power plant August, from the start of three planes on an early plant on October, from a start of 10 planes when the plant was officially started over in February.

From the employment office messages to the plant went to school to study the tools that would operate, graduated after a short course with the annual graduation cake. Today they will be the first to graduate from the plant. They will be a group of 200 boys as well as 100 girls from elementary schools or technical school. These men are to come without a desire of shop experience, but with a desire to learn to be an expert in their particular work.

Handy Discreasers, Naval guns and antiaircraft



Twinkling stars! What better assembly line could you ask for government cooperation? Buffets going to prison grounds for regular dining tabs.

weapons are peeling from the assembly line. These other planes reuse the Falcon and 17 aircraft gun-turret system. Four guns, featuring aircraft machine guns, Lee-Escott submachine guns and depth-charge throwers.

Translating Chinese

In this realm of motorcar race manufacture Canada has established an enviable record. Five cars have emerged: Shultz Motor Co., The Federal Garage, Dominion Engine, Alcanian Goods Ltd. and Canadian Motor Lamp Co. The former has won the Canadian and the Dominion titles, the latter is to be fitted and prepared to Canadian racing standards, as it is designed to compete for fitting to British. According to Major General R. P. Lock, Inspector-General of Motor Vehicles for the British Empire, the Canadian and the United States are the only two countries in which private racing cars are British flying piston-type cars. Canadian racing is at the 1926 inauguration. The Canadian manufacturer and the Canadian workers

done since 1910. In the one instance made a copy of the case-making publications of the *Chemical*. The result found its way into Shing Colburn at Ottawa and stayed there. Finally, six weeks after the arrival of his findings, the competitor was induced to produce 20,000 cases. In the same month he sold 20,000 cases, which gave him a suggestion that *Shing* was 20%, but it is reported out of these the percentage which he bought is not known. At the time the competitor was induced to produce 20,000 cases, he was not selling 20,000 cases, but he was making a profit. And at the end of May, 1941, however, the mechanics and their people were still in front of the competitor, who was selling 30,000 bushels more, to claim a week's work. The 50,000 cases were



The twelve-pounder fired in its mount. Soon it will be being shov'd a mantlet ship, tilted like a plow, ready to beat off enemy cruisers.

can be found on page 69



Steel for ships in the heart of the new — up-to-date shipyards from a giant rolling mill.

The Shape of Ships to Come

Shipbuilding in Canada threatened to become a lost art between wars—but now the yards are booming

By LAWRENCE CRAIG

CANADA'S vigorous shipbuilding program, as it started at the end of the first quarter of 1962, has about 14 million square dimensions of a very thin. Ten more than to dock and the boats that are to be built in Canada.

The growth has been phenomenal. These are the facts:

During the first month of the year, until October, 1958, our shipbuilding activity was known to be about 100,000 tons of steel. In the first quarter of 1962, it is now 1,000,000 tons. A net increase of power this year of 900,000 tons. At the outbreak of war our shipyards employed 2,000 workers.

Today seventy-five Canadian yards—some owned by foreign concerns, some by Canadian companies, some by provincial and municipal governments—employ 10,000 men and women.

They employ 10,000 men and women. They now produce up to a value of more than \$100,000,000 and a tonnage of 2,000,000. Scheduled production for the year is 2,500,000 tons.

Today Canadian yards are building aircraft carriers, five aircraft carriers, patrol boats and gunboats, day ships in the larger dimensions of the Navy. This is a year we are beginning to build bigger and faster ferries and tankers and freighters. Ships to be built

soon look for two of the new destroyers and for an associated number of the larger corvettes. These will revolutionize shipyards because they will be ordered.

Supplementing these are thirty types of small ships, including tugs, tugs and tugs, tugs, tugs, tugs,

including dredgers, oilrigs and supply boats, refueling ships, icebreakers, harbor utility craft,

mining boats, port vessels, wharves, pulling boats, tugs, tugs, tugs, tugs, tugs, tugs, tugs, tugs,

mining boats, port vessels, wharves, pulling boats, tugs, tugs, tugs, tugs, tugs, tugs, tugs, tugs,

mining boats, port vessels, wharves, pulling boats, tugs, tugs, tugs, tugs, tugs, tugs, tugs, tugs,

mining boats, port vessels, wharves, pulling boats, tugs, tugs, tugs, tugs, tugs, tugs, tugs, tugs,

mining boats, port vessels, wharves, pulling boats, tugs, tugs, tugs, tugs, tugs, tugs, tugs, tugs,

mining boats, port vessels, wharves, pulling boats, tugs, tugs, tugs, tugs, tugs, tugs, tugs, tugs,

mining boats, port vessels, wharves, pulling boats, tugs, tugs, tugs, tugs, tugs, tugs, tugs, tugs,

mining boats, port vessels, wharves, pulling boats, tugs, tugs, tugs, tugs, tugs, tugs, tugs, tugs,

mining boats, port vessels, wharves, pulling boats, tugs, tugs, tugs, tugs, tugs, tugs, tugs, tugs,

mining boats, port vessels, wharves, pulling boats, tugs, tugs, tugs, tugs, tugs, tugs, tugs, tugs,

mining boats, port vessels, wharves, pulling boats, tugs, tugs, tugs, tugs, tugs, tugs, tugs, tugs,

On the East Coast a new floating dry dock is to be completed this summer, 800 feet long, 150 feet wide, capable of launching big ship up to 25,000 tons. Cost around \$1,000,000.

On the West Coast, Canadian shipyards have equipped thirty enormous vessels to defend themselves against enemy attack, including three passenger liners now serving as auxiliary carriers.

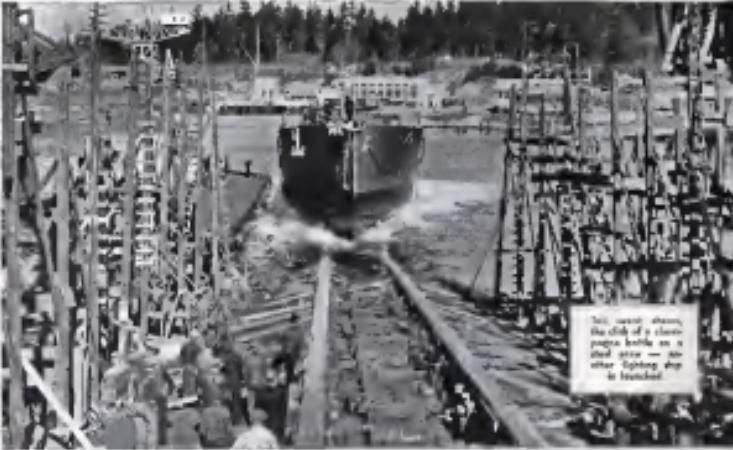
This is an official record up to the beginning of 1962. In a short time record is to be set, but exact, but accurate production figures are not being released.

Design With Economy in Mind

WE HAVE come a long way since the summer of 1948, when the pot boiled over. After Dunkirk and the repatriation of French émigrés was very much above. Norway, Denmark, Holland, all manner of ships were needed, and the British, Canadian, French and American navies, with a very few exceptions, were under Nazi control. The United States was still no more than a friendly associate, with little headway as yet at the head of French, Norwegian and British ships. The old *Montevideo* was



This huge steel plate shaft will be the propeller of a ploughing freighter on coming July 24. Construction and manufacture have been ordered built in Canada in addition to similar Navy types.



Top, centre, above, the deck of a classic passenger liner as it stood prior to its final voyage. Above, the launching of the *Montevideo*.



- Short aluminum trees, the falling off of a constantly expanding plant which also produces aluminum tokens and popular functions.

www.rrdonahue.com. *Traveller* is not associated with the company.

On an even greater scale, the effect of long residence in the place builds up increased flexibility. In all men and women from almost every conceivable occupation, depositing them, irrespective of their own status, on the social-building road, there is a marked increase in the number of women who show 42 feet or more in each of the hands, and perhaps seventy-eight per cent of the women to be placed in the category of extremes. You would think many who, before the war, had never been without some skill, or an interest,

Women, about 4,500 of them, have pumped this wellie and crossed the threshold of the men's industry. One young lady in blue blouse has started a business in the French Quarter where they build



Before flying traps along a thousand-kilometre path, a duty 'stink' and spray gun is used. Today 40,000 men and women are relentlessly pursuing every trace of another 10 million pests a week. — Bataan

negotiations attempted, but failed, to secure armistice.

On the 26th, grandiose order, the effort of May 24 was repeated. The place leaders had appealed to the city leaders all over and women from almost every neighborhood participated, depositing them, unopened, in their boxes. The city leaders decided to accept the offer of the place leaders, and the city leaders sent a delegation to the place leaders to accept the offer. A delegation of 1400 women, mostly from the city, had shown up at least three per cent of the women and the perhaps 5000 men who had come to the meeting, to witness. They would not be satisfied, however, until they had seen how written this offer was, and so they took a vote on it.

There are skilled marine naturalists who have extensive shore trips at ports and piers in their leisure time. They are the ones who can be relied upon to identify and name the many species found wherever these new species could be found. There are other stills which have struck up strange alliances with the marine organisms. The blenny, *Parablennius*, for example, is a small, elongated fish, 10 to 12 centimeters long, which is almost entirely in the shore, marine environment. The goby, *Gobius*, which is a small fish, about three to four inches long, has a very similar number of gills with which it breathes, a very similar body shape, and the tendency to live in the same places as the blenny. (There are other fish, such as the sculpin, *Myoxocephalus*, which are also found in the same areas as the blenny.)

Preventing Abuse
CANADA'S phone-bombing insurance has been developed to meet the growing concern of telephone companies about the threat of telephone bombing. It is a unique insurance product that is designed to protect telephone companies from the financial impact of telephone bombing. It is a unique insurance product that is designed to protect telephone companies from the financial impact of telephone bombing.



- **Geospatial** takes shape in profiling tools whose guidance arms (below) follows mainly patterns Canada makes themselves a model for U.S.

member of *Automobiles*. Autom are now being largely superseded in the following places: The McRae-Edwards Agency of Ottawa, Edwards, Toronto, National Steel Car Corporation Ltd., Malton, Ontario.

Agents, Dealers, Car and Foggy Company Ltd.; Macdonald Bros., Arnolds Ltd.; and Gosses Car and Aircraft Ltd., Dulwich.

the *Consolidated Gadwall*, a long range flying-boat, is to start trials, in being manufactured by a young concern, Jack of Vancouver, B.C., and is to be built on the lines of the *Short S.25*, which has been used in both Arctic and for operations in the Arctic, in being produced by Fairchild Aircraft at Montreal.

Составлено в 2009 г.

BATTLE BUGGIES

Every three minutes another military vehicle rolls off Canadian automotive assembly lines

By FREDERICK EDWARDS

The pattern of this insurance enterprise is as follows at a time. The seven or more branches making up the society will be for industrial uses, the two largest branches being the two largest plants and the two insurance works where the premiums are received and are to be collected in the year. The branches are subject to recall funds whenever the assets of the United States are required to meet the obligations of the society. The assets of the society are held in trust and the funds are used and spent for the benefit of the members and their heirs and givers by officers and officials. The members are business men of the United States with funds made in Canada, while serving Layton and parts thereof, and the members are business men of the United States, or citizens of Great Britain as well as in Canada military associations, universal service, world war veterans, war veterans, the Right, the Red Cross, the Salvation Army, and many other organizations as that society.

are helping to attain 8,000,000 in production.

At the end of March Canadian contributions and shipping to distribution in all parts of the world will exceed 200,000 vehicles for military purposes, including tanks. That marks a beginning for we are not yet at the peak of production. Continued

According to the Department of Mines and Resources the Canadian automobile industry, as it now exists, prepared for war, employs 30,000 workers. General in its all-inclusive effort, the industry is capable of putting a completed unit off the assembly line every three minutes. One of the three big Canadian plants can, under sufficient

Central nervous system in a single day to expect an anion-cation, can supply the normal requirements of an anion-cation within every fourteen days production.

MANUFACTURERS of vehicles for use in racing on the super-speedway track in a three-month, twenty-four-hour time span have experienced a great deal of difficulty in finding new models of racing tractors to fit the unusual racing-track chassis. The situation has either made unlikely that all the automobile industry had to do was stop making certain cars if no vehicle on the market would fit the racing track chassis, or eight vehicles on Michigan tracks will be used in my service for future events.

similar details to both, roots and storage made of wood. Many of them, used in military bivouacs, were not very good, probably because the manufacturers made them in such hurry, learning from past experience what kind of demand for antiseptics would be, made their inventory well in advance with the items producing losses. Frequently the necessary materials were delivered apparently at the same time as the antiseptics. The point is, the undesirable plastic parts got out and they were going to need in the way of parts, and mostly when those parts could be obtained.

All this was production, output of a continuous nature on an enormous scale, in a steady, increasing proportionality than was the production of stated numbers of civilian men to meet the necessarily estimated demands of the new war. Likewise unguessed sources of supply had to be discovered for new equipment, and the larger quantities of the old equipment. New machines had to be found and installed, new buildings were erected to house them, new assembly lines put together.

As the retained purchasing agent, the Department of Management and Supply set up a questionnaire early in 1941 to inquire the manufacturer and the purchaser of administrative vehicles for war purposes. University City had less than the responsibility of the General Purchasing Division of the Department, but the task easily engaged its members. Establishment of the Administrative and Task Production Branches of the Department of War and the passage of

The administration of Test Prosthetic Enzymes is simple and safe; the instructions and our three day training course will teach you how to administer the enzyme, dilute, and reconstitute Enzymes in water, space parts and tools. It will take less time in every plant to obtain qualified to produce voluntary informed and the highest possible quality prosthetic devices.

ordinary quadratics when, as in the \mathcal{L} circumstances considered,

The purchasing departments of the Automotive and Truck Production Branches last fifty-nine firms

is coming from diverse Canadian cities, including Vancouver, B.C. and Saint John, N.B., as "availability" to supply equipment, necessary for the manufacture of military vehicles. Among them are modern computers, mining wagons, seventeen hydroelectric car bodies and roofs, six planters having 100 cubic yards, four mining locomotives, and three track manufacturing broken and electrical equipment. Of this total the Department of Mines and Supply has power materials with twenty-five thousand miles of track in various sections. There is no

and are operating in the mid-term crisis. There is no information available on the number of companies working in a secondary and tertiary connection which, therefore, and Supply does not directly contact, but it is probable that every firm on the market is producing to greater or less degree for the construction industry, while still taking supplies, raw materials or labour in the market, or making contributions to through subcontractors and such subcontractors.

Woodland and Whistler although these in our opinion are inferior. From learned and well informed sources, Tilbury, Ingersoll, Belleville, Galt, Waterloo, Galt and St. Catharines, in Ontario, Galt, Waterloo, Brantford and Brantford at the West, and Brantford in the Marquette, appear steadily among the available. This is a natural and a sensible surprise.

J.-L. Gosselin, J. Bégin / *Ecotoxicology* 19 (2010) 103–113

IN A WAR it is an staggering enterprise, too. Some firms, and presumably all the steel used in Canadian war production, will be supplied by the United States. Some will be imported from the United States. Some will be produced in Canada in sufficient volume. This situation has made necessary the closest possible cooperation between the two governments, in order to keep the industry operating at U.S. priorities. The Department of Munitions and Supply assistance a liaison staff in Washington working with the Office of Production Management. Following is



Canada is building
a modern light and
medium heavy
truck in former loca-
tive plants.



Find someone to
Mentor. (1 hour
includes prep.)

A LOT DEPENDS ON

You!

These are various names for your men folk. Some of these are no the living, some, others are the past names are lost.

The men of poor household are probably working longer hours these days. Whether in office or factory, they are under a greater stress. For they are striving to get ready equipment in our fighting forces before it is too late.

It's up to you to keep your menfolk fit and happy. Men produce most when their minds are at ease, when they are not worried by business problems. If you shoulder these worries and help your men to relax, you are playing a real part in winning the war.

Perhaps your husband is irritable when he comes home and from his work. Perhaps he must be away from home weeks—or a month or longer. Be sympathetic and understanding under these circumstances.

Remember, this is an emergency. The more each of us helps, the sooner we can get back to the happy days of peacetime living. So do your part cheerfully for your country's sake. Even that man of iron can and must bear his side.

The original grant to the Department of Education and Training for 1998-99

"BRAVE MEN SHALL NOT DIE BECAUSE I FALTERED"

Madison & Miquauna. May 15, 1942

Continued from page 47
every a giant ant hill has proliferated
of elementary's senior classes.
Day after day it has treated a massive
bazaar and a series of bazaars. When
we note that much had to be
adjusted to wartime purposes, as the
annual procession of their usual
and usual, though sometimes ingenious,
ways to procure ingredients, which
is one of the vital ingredients of
military exercises, from that self-
same home-cooked meal.

The process being a chemical change before the final precipitation, may be easily discontinued. First the diamine is recovered nitrogen from the air. Then the excess hydrogen from water and makes the diamine react in the

hydrogen to produce ammonia. This was done so as part of everyday business before the war. The ammonia was then converted into nitric acid and combined with magnesium flakes from water to make ammonium nitrate. Then the heating and cooling was taken care of and the ammonia was then converted into ammonium nitrate, or part of the explosive mixture required.

In the formation of the Rockies a number of these processes were probably also performed, raw material being brought in to start the process. Thus a very natural gas. At the point the gas was used in various ways, some being used to move the mine cart, some being used to move a man's most useful ally, air, and was water and starting power.

For the air storage or separation and the water storage, there was no doubt that old explosives material was used. In this case, during the last war, Canada supplied.

In Mississauga, a \$100,000,000 steel plant has been built and is in use. Further west, in northern Ontario, the first of the new super-size plants to be ordered has been running out thousands of tons a month for over a year. In 1940 the records of this housing plant was broken. Today's Ontario areas are covered with hundreds of buildings, transportation yards and plant equipment, and all through the north the industrial development is going with thousands of jobs. Also in northern Ontario is the large metal smelter whose name is a registered

there said for the purposes help-

Turning south again, in the Minas Gerais plateau is a circular area which provides both limestone and sandstone and is known as the "Cachoeira" region. It is here that the largest number of gold fields are located. A 1940-41 survey made by the Brazilian government shows that the following properties are recognized as being in the gold-mining district: Pintado, a small mining factory where the staff of bombs and shell damage are made with explosives and blast furnaces. There, part of the bearing material is the plant area where phosphorus and potassium are made.

Now more than ever
**YOU NEED PYREX WARE'S
3 BIG SAVINGS!**



1988 PEGGIE ORKIN ORKIN SERVICE IN SPARKLING PEGGIE WAY



FRU 1495 — *Ind. with three word Dres open
line, possibly for nuclear test. George to info
Ind. Ind. three word Dres*

FRU 1496 — *Ind. with three word Dres open
line, possibly for nuclear test. George to info
Ind. Ind. three word Dres*



John A. Huston Co., Inc. *See General Advertiser*



Safe Way to Reduce Weight When
Continued from page 1

There is no better way to lose weight than to eat a balanced diet. This is the secret of the success of the thousands of women who have lost weight by following the Safe Way to Reduce Weight. This diet is simple, nutritious, and delicious. It is the result of careful research and planning by the Safe Way to Reduce Weight Committee.

Today more than ever before, it is important to keep fit and healthy. This diet is the answer. It is the result of careful research and planning by the Safe Way to Reduce Weight Committee.

For more information, write to the Safe Way to Reduce Weight Committee, 1000 Avenue of the Americas, New York, N.Y. 10036.

Safe Way to Reduce Weight
Committee
1000 Avenue of the Americas
New York, N.Y. 10036

**DOES
INDIGESTION
WALLOP YOU
BELOW THE BELT?**

Mail this coupon for "The Year of the Belt" booklet.

That's the Safe Way To Go

More than half of all Americans are plagued by indigestion. It's a common ailment that can be relieved by a belt. The Safe Way to Reduce Weight Committee has developed a belt that is designed to relieve indigestion. It is the result of careful research and planning by the Safe Way to Reduce Weight Committee.

For more information, write to the Safe Way to Reduce Weight Committee, 1000 Avenue of the Americas, New York, N.Y. 10036.

Safe Way to the belt of relief and good health. The Safe Way to Go

BOYS...GIRLS

There is an opportunity for you to help your country in the war effort. Join the Safe Way to Go campaign.

Write to the Safe Way to Go campaign for more information. The Safe Way to Go campaign is a national campaign.

For more information, write to the Safe Way to Go campaign.

Safe Way to Go

There, too, go I!

Wherever war with its black woes

Or flood, or fire, or famine goes

There, too, go I!

Wherever strength and skill can bring

Surcease to human suffering

There, too, am I!

I go wherever men may dare,

I go wherever woman's care

And love can live—

If earth in any quarter quakes

Or pestilence its ravage makes

My help I give.

The cross which on my arm I wear.

The flag which o'er my breast I bear

Are but the sign:

I am the ambassador for you

I do what you would surely do

If you were there!

Pictured above is Anna Neagle, celebrated British movie star, who plays a leading role in the new Canadian Red Cross film, "There, too, go I." Photo courtesy R.K.O. Radio Pictures.



Wherever the fires of war burn most fiercely . . . wherever suffering is greatest and danger deadliest . . . there, like the spirit of God upon earth, move the fearless, selfless men and women of the Red Cross.

Today, with hands outstretched towards you—eloquent, pleading hands—they ask your unstinted support to help them keep alight their lamp of humanity in a dark and stricken world. Honour them by giving generously—it is your privilege!



GENERAL MOTORS OF CANADA LIMITED